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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,161	08/08/2005	Robert Giehl	30051/41004	6490
4743 7590 10/22/2008 MARSHALL, GERSTEIN & BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606			EXAMINER STEVENS, THOMAS H	
			ART UNIT 2121	PAPER NUMBER
			MAIL DATE 10/22/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,161

**Applicant(s)**

GIEHRL ET AL.

**Examiner**

THOMAS H. STEVENS

**Art Unit**

2121

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 and 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-9 and 13-23 were examined.

***Section I: Final Rejection***

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9,13-23 are rejected under 35 U.S.C. 102(b) as being anticipated Schwenke ET al.(US Patent Schwenke; hereafter Schwenke). Schwenke discloses a data construct set (abstract).

Claim 1. Method for displaying data (e.g. of data, figure 82 and 83, with figure 83 element 8617 activity or status "extended requested")of a machine control system ("control mechanisms" column 31, lines 10-26)comprising: receiving status data (elements 8517 and 8513 in figure 81)for at least one element (column 84, lines 1-50)of the system, which represent at least one physical state variable (state variable emanates from the state machine, column 153, lines 57-61); representing the status data (elements 8517 and 8513 in figure 81) which have been received for the element(column 84, lines 1-50); representing a circuit diagram (e.g., figure 81, element

8507), which displays, at least for the element, (column 84, lines 1-50) an electrical connection of the element (column 84, lines 1-50) to other individual elements (column 84, lines 1-50) in the system; where the representation of the status data (elements 8517 and 8513 in figure 81) which have been received for the element (column 84, lines 1-50) occurs in the represented circuit diagram (e.g., figure 81, element 8507).

Claim 2. Method according to Claim 1, where the representation of the circuit diagram (e.g., figure 81, element 8507) occurs using a characterization, which has been stored (figure 1A, elements 16 and 14) for the element, (column 84, lines 1-50) and associated connection data, which represent the electrical connection of the element (column 84, lines 1-50) in the system.

Claim 3. Method according to Claim 2, where the characterization allows the association of the element (column 84, lines 1-50) with its status data (elements 8517 and 8513 in figure 81).

Claim 4. Method according to Claim 1, where the status data (elements 8517 and 8513 in figure 81) are displayed one of at or on the represented element (column 84, lines 1-50) in the circuit diagram (e.g., figure 81, element 8507).

Claim 5. Method according to Claim 1, where the step of receiving the status data (elements 8517 and 8513 in figure 81) also comprises an identification of elements, (column 84, lines 1-50) which are to be represented in the circuit diagram (e.g., figure 81, element 8507), where the representation of the status data (elements 8517 and 8513 in figure 81) for the identified elements (column 84, lines 1-50) occurs.

Claim 6. Method according to Claim 1, where, in response to user input, which establishes a preset value (most CAD programs have preset values, column 2, lines 11-24) for the represented status data, the preset value (most CAD programs have preset values, column 2, lines 11-24) is set as a value for the corresponding state variable (state variable emanates from the state machine, column 153, lines 57-61) in the machine control system("control mechanisms" column 31, lines 10-26).

Claim 7. Method according to Claim 1, where corresponding target values are displayed with the status data (elements 8517 and 8513 in figure 81)for the element(column 84, lines 1-50).

Claim 8. Method according to Claim 1, where corresponding limit values are displayed with the status data (elements 8517 and 8513 in figure 81)for the element (column 84, lines 1-50).

Claim 9. Method according to Claim 1, where previous status data (elements 8517 and 8513 in figure 81)for the element (column 84, lines 1-50)are represented, which indicate at least one previous value for the state variable (state variable emanates from the state machine, column 153, lines 57-61).

Claim 13. Method according to Claim 2, where the step of receiving the status data (elements 8517 and 8513 in figure 81)also comprises an identification of elements, (column 84, lines 1-50) which are to be represented in the circuit diagram (e.g., figure 81, element 8507), where the representation of the status data (elements 8517 and 8513 in figure 81)for the identified elements(column 84, lines 1-50) occurs.

Claim 14. Method according to Claim 2, where, in response user input which establishes a preset value (most CAD programs have preset values, column 2, lines 11-24) for the represented status data, the preset value (most CAD programs have preset values, column 2, lines 11-24) is set as a value for a corresponding state variable (state variable emanates from the state machine, column 153, lines 57-61) in the machine control system("control mechanisms" column 31, lines 10-26).

Claim 15. Method according to Claim 5, where, in response to the user input which establishes a preset value (most CAD programs have preset values, column 2, lines 11-24) for the represented status date, the preset value (most CAD programs have preset values, column 2, lines 11-24) is set as a value for the corresponding state variable (state variable emanates from the state machine, column 153, lines 57-61) in the machine control system("control mechanisms" column 31, lines 10-26).

Claim 16. Method according to Claim 2, where corresponding target values are displayed with the status data (elements 8517 and 8513 in figure 81)for the element (column 84, lines 1-50).

Claim 17. Method according to Claim 2, where corresponding limit values are displayed with the status data (elements 8517 and 8513 in figure 81)for the element(column 84, lines 1-50).

Claim 18. Method according to Claim 7, where corresponding limit values are displayed with the status data (elements 8517 and 8513 in figure 81)for the element(column 84, lines 1-50).

Claim 19. Method according to Claim 7, where previous status data (elements 8517 and 8513 in figure 81)for the element (column 84, lines 1-50)are represented which indicate at least one previous value for the state variable (state variable emanates from the state machine, column 153, lines 57-61).

Claim 20. Method according to Claim 8, where previous status data (elements 8517 and 8513 in figure 81)for the element (column 84, lines 1-50)are represented which indicate at least one previous value for the state variable (state variable emanates from the state machine, column 153, lines 57-61).

Claim 21. Device for displaying data (e.g. of data, figure 82 and 83, with figure 83 element 8617 activity or status "extended requested") of a machine control system, said device comprising: receiving means for receiving status data (elements 8517 and 8513 in figure 81)for at least one element (column 84, lines 1-50)of the system, which represent at least one physical state variable (state variable emanates from the state machine, column 153, lines 57-61); representing means for representing the status data (elements 8517 and 8513 in figure 81)which have been received for the element (column 84, lines 1-50)and for representing a circuit diagram (e.g., figure 81, element 8507), which displays, at least for the element (column 84, lines 1-50)the electrical connection of the element (column 84, lines 1-50)to other individual elements (column 84, lines 1-50)in the system; where the representation of the status data (elements 8517 and 8513 in figure 81)which have been received for the element (column 84, lines 1-50)occurs in the represented circuit diagram (e.g., figure 81, element 8507).

Claim 22. Device according to claim 21, where the device is a mobile end device, which is used for one of the startup process, maintenance or error diagnosis (suggestion of an error message, column 55, lines 12-15) of a machine control system ("control mechanisms" column 31, lines 10-26).

Claim 23. A system comprising a device in combination with a machine control system ("control mechanisms" column 31, lines 10-26), wherein said device is adapted to display data of the machine control system, ("control mechanisms" column 31, lines 10-26) said device comprising: receiving means for receiving status data (elements 8517 and 8513 in figure 81) for at least one element (column 84, lines 1-50) of the system, which represent at least one physical state variable (state variable emanates from the state machine, column 153, lines 57-61); representing means for representing the status data (elements 8517 and 8513 in figure 81) which have been received for the element (column 84, lines 1-50) and for representing a circuit diagram (e.g., figure 81, element 8507), which displays, at least for the element, (column 84, lines 1-50) the electrical connection of the element (column 84, lines 1-50) to other individual elements (column 84, lines 1-50) in the system; where the representation of the status data (elements 8517 and 8513 in figure 81) which have been received for the element (column 84, lines 1-50) occurs in the represented circuit diagram (e.g., figure 81, element 8507).

## ***Section II: Response to Arguments***



4. Clarifying the status data, and displaying an electronic connection limitation, the prior art, figure 81, displays a gui interface which has an "electrical connection" of two capacitors (element 8507) with the activity or status of the device (e.g., "cylindicator sensor failure", element 8517) which represents the received status of said connection. One of ordinary skill in the art using a CAD based circuit analysis program would recognize the schematic of figure 81 that entails a single or perhaps a plurality of electronic components that make up a particular circuit; the CAD program would have indicators, for example, node compatibility or nodal analysis, to indicate or provide "status data" as to whether a connection is compatible or not as so indicated in figure 81, element 8517 (i.e., „cylindicator sensor failure"). Rejection stands.

### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Tom Stevens whose telephone number is 571-272-3715.

If attempts to reach the examiner by telephone are unsuccessful, please contact examiner's supervisor Mr. Albert Decady (571-272-3819). The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>.. Answers to questions regarding access to the Private PAIR system, contact the Electronic Business Center (EBC) (toll-free (866-217-9197)).

/Albert Decady /  
Supervisory Patent Examiner  
Tech Center 2100

/Thomas H. Stevens/

Examiner, Art Unit 2121